Monitoring and Predictive Modeling of Bacteria in Support of Recreational Use of the Lower Anacostia River, Washington D.C. Prepared for the Washington D.C. Department of Energy and Environment By The US. Geological Survey MD-DE-DC Water Science Center

Timothy P. Wilson, Jonathan J.A. Dillow and Matthew J. Cashman

Funding thru DC DOEE US EPA Urban Waters Federal Partnership USGS Directed Cooperative Matching Funds. 3-year project to evaluate and monitor bacteria abundance in Lower Anacostia River and tributaries

Year 1. Evaluate existing DOEE data base (2000-present)

(A) temporal and spatial distribution of bacteria

(2) determine relations between bacterial abundance and streamenvironmental conditions – can E. Coli abundance be predicted using environmental and WQ parameters?

E. Coli = f(temperature, weather, turbidity, season, WQ parameters, other....)

Next steps

Timothy P. Wilson to present at Q4 LCCAR